with repeated non-adherence despite being corrected. Managers work with adherence in own unit, while there is little coordination between the units. Each manager decides how work should be organized for their staff; there is no hospital joint strategy. Wishes are expressed about spending time with the senior manager to discuss the unit's adherence and the need for improvement measures and actions for those with low adherence.
Conclusion: Adherence to hygiene procedures would probably increase if managers interact, coordinate and have more unified strategies and a hospital-wide focus on hygiene procedures.
Keywords: Hospital managers, patient safety, adherence, hygiene procedures, intersectoral collaboration.

OS 12-4

DOES THE EXTENSIVE USE OF QAC DISINFECTANTS SELECT FOR ENTEROTOXIGENIC *STAPHYLOCOCCUS AUREUS*?

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Purpose: Quaternary ammonium compounds (QAC) are broad spectrum disinfectants which are commonly used in clinical settings and the food industry. It is evident that the extensive use of QAC may select for antibiotic resistance as determinants encoding resistance to these agents may be carried by the same plasmids. These mobile genetic elements carry numerous virulence factors including staphylococcal enterotoxins (SE), designated A to X, which are responsible for staphylococcal food poisoning. This study investigated the association between the presence of QAC genes and SE genes in *S. aureus*.
Methods: Three hundred sixteen *S. aureus* strains were isolated from the anterior nares of food handlers working in hospital kitchens and large catering premises in the community. All isolates were examined for antibiotic sensitivity by standard disc diffusion and the presence of genes encoding reduced susceptibility to QACs and SE by PCR.
Results: The presence of *qacA/B* was significantly associated with carriage of the *ser* gene (OR = 6.6, 95% CI 1.7 − 25.6, p = 0.021). In addition, *ses* and *set* were more commonly detected in *qacA/B* positive isolates, representing 18.2% and 11.8% respectively, in comparison to *qacA/B* negative strains, representing four percent of the isolates (p = 0.073), approaching statistical significance. Resistance to tetracycline (OR = 7.3, 95% CI 2.2 − 23.9, p = 0.001), cefoxitin (OR = 15.2, 95% CI 4.1 − 56.2, p=0.002), ciprofloxacin (OR = 7.4, 95% CI 1.4 − 39.4, p=0.050) and gentamicin (OR = 4.1, 95% CI 1.7 − 9.8, p = 0.017) was significantly associated with the presence of *qacA/B* gene. No association was detected between *smr* and SE genes.
Conclusion: This is the first study which suggested co-selection of disinfectant resistance genes and SEs, indicating that routine use of QAC disinfectant in the food industry may provide a survival advantage for enterotoxigenic *S. aureus* strains. This may increase the risk for food poisoning amongst consumers. Rotation of disinfectant use is recommended.

OS 12-5

CHARACTERISTICS AND POTENTIAL RISKS OF OUTBREAKS IN POSTPARTUM NURSING CENTERS IN TAIWAN, 2007−2014

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Background: Postpartum nursing centers (PNCs) are institutions providing short-term full-day nursing care to postpartum women and their babies. Respiratory tract infection or enterovirus infection easily spreads out if infection control measures were not taken adequately. We characterized outbreaks in PNCs and identified etiology and source of the outbreaks.
Methods: In Taiwan, suspected outbreaks including respiratory tract infection, fever, or acute diarrhea≥3 times/day, must be reported to the corresponding local public health departments. Verified outbreaks are registered to the Epidemic Investigation Report Files Management System (EIRFMS). Clinical specimens were collected from 2−29 cases in each outbreak and tested for influenza virus, respiratory syncytial virus (RSV), enterovirus, *Bordetella pertussis*, or other pathogens depends on the presented symptoms. We conducted descriptive analyses by extracting epidemiological data, etiology and infection source of EIRFMS-registered outbreaks in PNCs from January 2007 to September 2014.
Results: We identified 29 outbreaks in PNCs (438 cases, median size 12 cases, range 2−45 cases). The annual number of outbreaks ranged from 1−10, and 17(59%) occurred after January 2013. RSV (n = 21), Echo 30 virus (n = 1), *Bordetella pertussis* (n = 1), and influenza B virus (n = 1) were identified as the etiologic agents. All cases comprised 367 (84%) babies, 47 (11%) mothers, and 24 (5%) staff member. Of 367 babies (median age 17 days, range 0−40 days), 151 (41%) were hospitalized, mostly attributed to RSV (n = 125). During the outbreaks, the first known case-patient was mother (n = 10), staff member (n = 3), or unspecified (n = 16).
Conclusions: Outbreaks in PNCs have been increasingly identified. RSV was the leading cause and accounted for most hospitalization. The ill mothers were most frequently implicated as the infection source during outbreaks. We recommend strengthening maternal symptoms surveillance and quarantine babies of ill mothers.

OS 12-6

RUNNING AN INFECTION CONTROL MONTHLY MEETING ENCOURAGED COMMUNICATION BETWEEN THE INFECTION CONTROL TEAM (ICT) AND CLINICAL UNITS IN A HOSPITAL IN CHINA

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Purpose: To find an effective way to develop and improve communication between the infection control team and clinical units in a newly opened university teaching hospital in China.
Methods: Running an Infection Control meeting in the last week of each month, most participants were Infection Control Link Nurses (ICLNs) officially but ask other people such as managers and directors from the hospital management to take part in sometimes. The issues for discussion would be collected beforehand. During the meeting, members of ICT delivered and shared new knowledge, skills, information in terms of infection control with other participants. They also did feedback about all the kinds of surveillance data during last month including nosocomial infection, hand hygiene, MDRO, occupational exposure, medical waste. They used half of time to discuss current infection control problems existed from each wards and tried to solve them together.
Results: The monthly meeting helped to build the culture related to infection control across the hospital. The health care workers (HCWs) paid more attention to the infection prevention rather than infection control. The ICLNs put the rules and strategies of hospital infection control into the clinical practices. They supervised and improved correct behavior when health care workers did medical procedures. Also ICT developed a few projects to promote hand hygiene, medical waste management, and safe practices among HCWs.
Conclusion: Infection control is everyone's business and responsibility, they must work together to get the goal. Monthly meeting improved multi-departments collaboration, it built a new platform to communicate, to learn and to understand, and it saved time, resources and labor too.

OS 12-7

UNEXPECTED LOW HAND HYGIENE COMPLIANCE OF HEALTH CARE WORKERS IN TAIWAN: A NATION-WIDE COVERT OBSERVATION PROGRAM

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Purpose: Observation and feedback of hand hygiene (HH) compliance is a core element of infection control in health care. Overt observation usually overestimates HH compliance due to observation bias, also known as Hawthorne effect. An overtly observed nation-wide HH compliance announced